# CarbonAi

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| CarbonAi | Greenhouse Gas Emission Reduction Ecosystem Software |

## COMPANY DESCRIPTION

CarbonAi is a world-leading developer of software tools that ensure the integrity of greenhouse gas (GHG) reduction data, support digital measurement, reporting and verification (dMRV) and generate exceptionally high-quality GHG outcomes. Based in Calgary, Alberta, CarbonAi's technology has enabled the quantification and verification of GHG reductions from 12,500 remote methane-emitting devices, resulting in the successful registration and sale of over 3.1 million tonnes of compliance GHG reduction credits in the oil and gas sector. To address the complex demands of GHG data management, CarbonAi offers a flexible, integrated monitoring, reporting, and verification (MRV) platform. Our suite of solutions—the Spark Ecosystem, and Field, Field+, Proof, View—empowers organizations to confidently quantify, track, and monetize GHG reductions, ensuring regulatory compliance and driving meaningful environmental impact.

**How it Works:** CarbonAi's ecosystem leverages advanced technology to ensure precision, traceability, and scalability in offset program management. It includes hardware innovation within the Spark Ecosystem, customised Field apps, Proof, and View. SMART IDs, enabled through a cross-licensing agreement with Fiùtur, are secured on a distributed ledger, ensuring transparency and seamless integration with financial networks and registries.

The Field App provides field operators and program managers with a seamlessly integrated interface for monitoring, data collection, and program management. Advanced features include:

- **Offline Functionality:** Capable of storing data locally during connectivity outages, the app synchronizes with the platform once a connection is re-established, ensuring no data loss.
- **Dynamic Geolocation Integration:** Using advanced GPS tagging, the app provides precise locational metadata for all recorded data points, enhancing auditability.
- **Role-Based Access Control:** Built-in user authentication ensures that only authorized personnel can input or access sensitive data, maintaining program security.

Proof is a robust data processing engine that converts raw data from the Spark ecosystem into actionable, traceable, and verifiable outcomes. Key capabilities include:

- **Real-Time Outcome Generation:** Proof processes stove usage and emissions data through proprietary algorithms, generating high-resolution carbon outcomes instantly while maintaining compatibility with registry protocols.
- **Protocol-Agnostic Design:** Proof supports multiple methodologies, enabling seamless integration with registries like Verra, Gold Standard, and compliance programs such as CORSIA.
- **Verified Hash Integration:** By embedding پ cryptographic hash values into data records, Proof guarantees outcome immutability and ensures traceable provenance from source to outcome.

View is the software ecosystem's comprehensive analytics and visualization suite, designed to provide stakeholders with actionable insights into program performance. Features include:

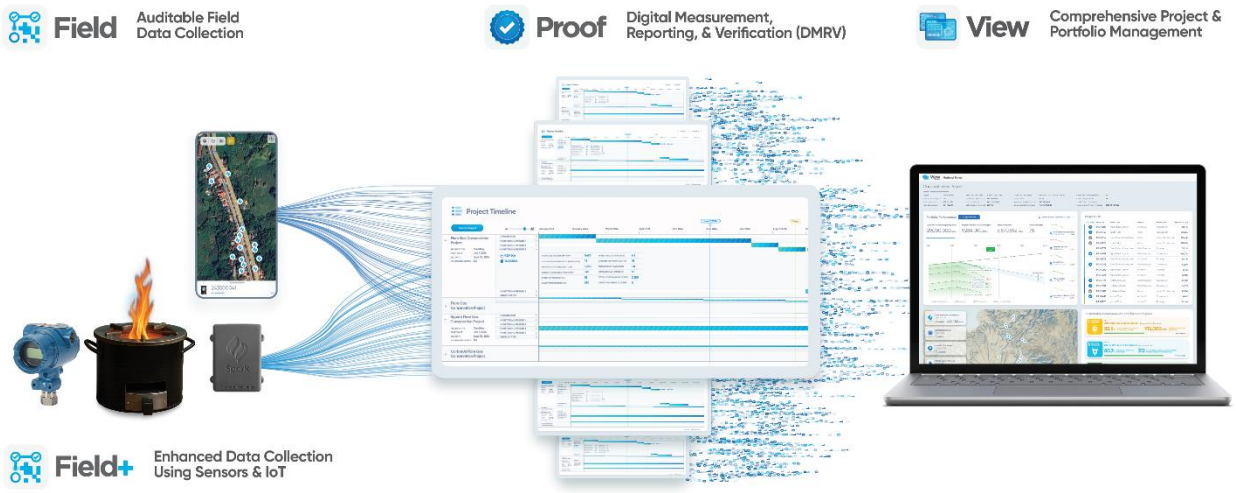
- **Customizable Dashboards:** Stakeholders can create bespoke views of program metrics, tracking everything from stove usage rates to emissions reductions in real-time.

- **Advanced Data Analytics:** Machine learning models identify patterns and anomalies in the data, offering predictive insights that inform deployment strategies and resource allocation.

**Value Proposition:**

CarbonAi's innovation focused on advanced dMRV infrastructure aims to address the gap in carbon markets by providing transparent, verifiable and finance-grade carbon credit solutions. The core technology enables automated data collection, validation and secure transmission of field data from emission sources and sinks to a centralised computing system, ensuring both data integrity and enabling third party validation procedures.

Legacy carbon markets have operated with analog, centralised registries that rely on manual reporting, self-disclosed emission reductions and opaque verification process. These outdated systems have led to widespread issues including low integrity of carbon outcomes and lack of interoperability. CarbonAi addresses these pain points by creating a comprehensive digital carbon assurance system with automated sensor data acquisition, GHG reduction project registration and co-operation with third party validation frameworks. By replacing analog processes with digital automation, verification costs are significantly reduced and credit issuance time frames are accelerated, enabling confident investment in carbon-related assets.



## RECENT SUCCESSES

In January 2025, CarbonAi announced a partnership with Greenplinth Africa to support a major clean cookstove program in Nigeria that aims to distribute millions of efficient cookstoves over the next five years. Under this agreement, CarbonAi's Spark suite will digitize the measurement, reporting, and verification of greenhouse gas reductions—ensuring transparent, high-integrity data capture for carbon credit generation. This initiative addresses key sustainable development goals by reducing deforestation, air pollution, and respiratory health risks for rural households while creating a robust pipeline for carbon-financed cookstove projects.

Additionally, CarbonAi continues to expand its client base across North America and Africa, driven by ongoing commitments from governments and corporations to achieve net-zero targets. Their leadership team's combined 75 years of experience in GHG project development, carbon finance, and engineering underpins these strategic partnerships, positioning CarbonAi as a critical enabler of high-impact emissions-reduction projects worldwide.

**PTAC's Contribution to Success**: CarbonAi has collaborated with PTAC to foster a strong environment for technology development by engaging with end users, government funders, and innovation ecosystem partners. These efforts enhanced market understanding and supported broader technology deployment. Leveraging PTAC's platforms, including domestic events, the Methane Leadership Summit, Digital Innovation Forum, TEREE committee, and global conferences like CERAWeek, OTC, COP 29, and the World Petroleum Congress, CarbonAi gained valuable exposure to both Canadian producers and international markets. These efforts have been instrumental in de-risking international market development and enabling a level of scale and visibility that the company could not achieve alone. These initiatives also diversify export opportunities beyond the U.S. while reducing financial risk through modest funding support. The outcome contributed to growth in sales and employment despite geopolitical headwinds, with continued expansion anticipated.

**Notable Export Achievements:**

- **Successfully integrated software ecosystem to develop a Flare gas conservation project in Egypt** → Developed and deployed an integrated software ecosystem for flare gas conservation in Egypt, reducing methane emissions and improving energy efficiency at oil and gas facilities.
- **Deployed 4 Spark ecosystem trials in Bangladesh, Pakistan, Laos and Nigeria to improve Clean Cooking carbon projects** → Executed Spark ecosystem pilot programs across four countries (Bangladesh, Pakistan, Laos, and Nigeria) to enhance clean cooking initiatives and carbon credits.
- **Technology excellence through integration with the Zefiro methane lifecycle solution supporting methane reduction activities on orphan wells across the United States** → Achieved technical integration with Zefiro's methane lifecycle solution to support methane reduction operations at orphaned oil and gas wells throughout the United States.

"PTAC continues to drive climate excellence within the Canadian energy landscape and CarbonAi is pleased to contribute to PTAC's export of knowledge and best practices to the international energy community."

- Kelly Parker (Director, GHG Projects)

Cutting-edge software solutions that empower organisations to manage, monitor and monetize GHG -reduction data. Driven by Impact.